

REMARKS

Entry of the foregoing amendment(s) is respectfully requested.

The claims have been amended to eliminate multiple dependency and to place them in better condition for U.S. patent practice.

Should the Examiner have any questions concerning the subject application, a telephone call to the undersigned would be appreciated.

Respectfully submitted,

BURNS, DOANE, SWECKER & MATHIS, L.L.P.

By: 

Teresa Stanek Rea
Registration No. 30,427

P.O. Box 1404
Alexandria, Virginia 22313-1404
(703) 836-6620

Date: January 3, 2002

20020501 1696T00T

Application No. Unassigned
Attorney's Docket No. 022701-974
Mark-up of Claims - Page 1

Attachment to Preliminary Amendment dated January 3, 2002

1. (Amended) A dehydrofluorination process [which makes it possible] to convert an aromatic carbamoyl fluoride to the corresponding isocyanate, [characterized in that said] comprising subjecting carbamoyl fluoride [is subjected] to a temperature at least equal to 80°C, [advantageously at least equal to 90°C,] in a solvent and [in that,] at [said] a temperature of at least 80°C, wherein said carbamoyl fluoride is in the dissolved or finely dispersed state in the solvent.

2. (Amended) The process as claimed in claim 1, [characterized in that] wherein said reaction temperature is at most equal to 150°C.

3. (Amended) The process as claimed in [claims 1 and 2] claim 1, [characterized in that] wherein said solvent exhibits a boiling point of at least 100°C[, advantageously 120°C].

4. (Amended) The process as claimed in [claims 1 to 3] claim 1, [characterized in that] wherein the reaction is carried out at a pressure such that, at the reaction temperature, the solvent is boiling.

5. (Amended) The process as claimed in [claims 1 to 4] claim 1, [characterized in that] wherein the solvent is [chosen from those which are] miscible with hydrofluoric

10019694-050302

Attachment to Preliminary Amendment dated January 3, 2002

acid[, advantageously from halogenated aromatic derivatives] which [do] does not react with the carbamoyl fluoride.

6. (Amended) The process as claimed in [claims 1 to 5] claim 1, [characterized in that] wherein said carbamoyl fluoride is introduced into the solvent with hydrofluoric acid[, advantageously in the form of a solution in anhydrous hydrofluoric acid].

7. (Amended) The process as claimed in claim 6, [characterized in that] wherein the ratio of the hydrofluoric acid to the carbamoyl fluoride (HF/carbamoyl fluoride) is at least equal to 2[, advantageously to 3, preferably to 4].

8. (Amended) The process as claimed in [claims 1 to 7] claim 1, [characterized in that] wherein the addition of the carbamoyl fluoride[, advantageously in the form of a solution,] takes place gradually to a solvent heel brought to the chosen reaction temperature.

9. (Amended) The process as claimed in [claims 1 to 8] claim 1, [characterized in that] wherein the addition is carried out at a rate such that, in the ten final 90% of the reaction duration taking place below 100°C, [advantageously below 90°C,] the molar ratio of hydrofluoric acid to isocyanate (HF acid/aromatic isocyanate) is always less than 0.5[, advantageously than 0.3, preferably than 0.1].

10019694-050302

Attachment to Preliminary Amendment dated January 3, 2002

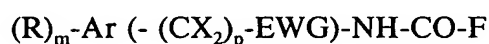
10. (Amended) The process as claimed in [claims 1 to 9] claim 1, [characterized in that] wherein the carbamoyl fluoride substrate comprises an aliphatic carbon, that is [to say of] sp^3 hybridization, carrying at least two fluorines.

11. (Amended) The process as claimed in claim 10, [characterized in that] wherein said aliphatic carbon carrying at least two fluorines is a benzyl carbon[, that is to say that it] and is directly attached to an aromatic ring.

12. (Amended) The process as claimed in claim 11, [characterized in that] wherein said aromatic ring is that carrying the nitrogen of the carbamoyl functional group.

13. (Amended) The process as claimed in [claims 1 to 12] claim 1, [characterized in that] wherein the reaction mixture comprises less than 1%, with respect to the starting carbamoyl fluoride, expressed as moles, of impurities exhibiting a chlorine in the benzyl position.

14. (Amended) The process as claimed in [claims 1 to 13] claim 1, [characterized in that [lacuna]] wherein the substrate corresponds to the formula:



where:

- Ar is an aromatic residue;

10019694-050302

Attachment to Preliminary Amendment dated January 3, 2002

- the X units, which are alike or different, represent a fluorine or a radical of formula C_nF_{2n+1} with n an integer at most equal to 5[, preferably to 2];
- p represents an integer at most equal to 2;
- EWG represents a hydrocarbonaceous group or an electron-withdrawing group, the optional functional groups of which are inert under the reaction conditions[, advantageously fluorine or a perfluorinated residue of formula C_nF_{2n+1} with an integer at most equal to 8, advantageously to 5].

The total carbon number of $-(CX_2)_p$ -EWG is [advantageously] between 1 and 15[, preferably between 1 and 10.];

- m is 0 or an integer [chosen within the closed range (that is to say,) comprising [the limits]] 1 to 4;
- R represents alike or different radicals [chosen from] comprising halogens[, advantageously light halogens (that is to say, chlorine and fluorine), and] or hydrocarbonaceous radicals[, preferably alkyl, aryl, alkylchalcogenyl (such as alkyloxy) or arylchalcogenyl (such as aryloxy) radicals].

15. (Amended) The process as claimed in [claims 1 to 14] claim 1, [characterized in that] wherein the solvents are [chosen] selected from the group consisting of chlorobenzenes, advantageously monochloro-, dichloro- and trichlorobenzenes.

10019694-050302